

**Maryland Historical Trust**

**Maryland Inventory of Historic Properties Number:**

**Name:**

**The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridged received the following determination of eligibly.**

**MARYLAND HISTORICAL TRUST**

Eligibility Recommended     X    

Eligibility Not Recommended \_\_\_\_\_

Criteria:      A      B      C      D Considerations:      A      B      C      D      E      F      G      None

**Comments:**

Reviewer, OPS: Anne E. Bruder

Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze

Date: 3 April 2001

Maryland Inventory of Historic Properties  
Historic Bridge Inventory  
Maryland State Highway Administration  
Maryland Historical Trust

MHT Number CAR-304

SHA Bridge No. 5019 Name: MD 480 over Forge Branch (Forge Branch Bridge)

**Location:**

Street/Road Name and Number: MD 480 (Ridgely Road)

City/Town: Greensboro Vicinity \_\_\_\_\_

County: Caroline

Ownership: X State \_\_\_ County \_\_\_ Municipal \_\_\_ Other

This bridge projects over: \_\_\_ Road \_\_\_ Railway X Water \_\_\_ Land

Is the bridge located within a designated district: \_\_\_ yes X no

\_\_\_ NR listed district \_\_\_ NR determined eligible district

\_\_\_ locally designated \_\_\_ other

Name of District \_\_\_\_\_

**Bridge Type:**

\_\_\_ Timber Bridge

\_\_\_ Beam Bridge \_\_\_ Truss-Covered \_\_\_ Trestle

\_\_\_ Timber-and-Concrete

\_\_\_ Stone Arch

\_\_\_ Metal Truss

\_\_\_ Movable Bridge

\_\_\_ Swing \_\_\_ Bascule Single Leaf \_\_\_ Bascule Multiple Leaf

\_\_\_ Vertical Lift \_\_\_ Retractable \_\_\_ Pontoon

\_\_\_ Metal Girder

\_\_\_ Rolled Girder \_\_\_ Rolled Girder Concrete Encased

\_\_\_ Plate Girder \_\_\_ Plate Girder Concrete Encased

\_\_\_ Metal Suspension

\_\_\_ Metal Arch

\_\_\_ Metal Cantilever

X Concrete

X Concrete Arch \_\_\_ Concrete Slab \_\_\_ Concrete Beam \_\_\_ Rigid Frame

\_\_\_ Other Type Name \_\_\_\_\_

**Describe Setting:**

Bridge 5019 carries MD 480 over Forge Branch in Caroline County. MD 480 runs east-west over the northern flowing Forge Branch. The bridge is in a sparsely settled area.

**Describe Superstructure and Substructure:**

Bridge 5019 is a single span closed spandrel concrete arch bridge. The length of the bridge is 55 feet from end wall to end wall with a clear span of equal length. The rise is approximately 12 feet 6 inches. The crown is approximately 2 feet 2 inches. The spandrel walls are approximately 14 feet high and 15 feet wide. There is a clear roadway width of 30 feet, with an overall width of 35 feet 10 inches. The arch ring has a 1-inch angle and a 2-inch cove molding. The arch has longitudinal and map cracking. There is some moisture and efflorescence. The arch ring has several pop outs with exposed aggregate and reinforcement bars. However, most of these areas have been patched with mortar. The spandrel walls have fine vertical and map cracks. The wingwalls on both the northern and the southern sides of the bridge are made of concrete. According to a 1996 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 81.6.

Bridge 5019 has its original parapets. The parapets are 55 feet across on both the eastern and western sides of the bridge. The parapets are separated into 7 sections. The second, third, fourth, fifth, and sixth sections from the northern and southern approaches are approximately 9 feet long and 3 feet high. The parapet is an open paneled design. Each section has 12 open parapets that are poured into the deck. Each of these sections is separated by a 1 foot 6 inch squared closed panel. The first and seventh sections are approximately 25 feet long and 3 feet high. These end sections are closed panels. The end sections have 2 1-inch incised panels. Each incised panel is 10 feet long and 1 foot high. A felt joint that measures 1/4-inch separates each section. All of the parapets are topped with a concrete cap measuring approximately 4 inches by 6 inches. The parapets have vertical and longitudinal cracking. The south parapet cap has 1 section with on the west end elevated by 2 inches. The elevated area is about 4 inches long and is located near mid-span. The bases and safety curbs are spalled and cracked. The worst area is on the south side where a 12-foot long, 1 1/2-foot wide spall was observed.

**Discuss Major Alterations:**

No major alterations have occurred.

**When Built:** 1932

**Why Built:** Expansion of Caroline County infrastructure. Replacement of an earlier structure.

**Who Built:** State Roads Commission

**Why Altered:** N/A.

**Was this bridge built as part of an organized bridge building campaign?**

It is unknown if this structure was built as part of a road construction project between Ridgely and Greensboro.

**Surveyor Analysis:**

**This bridge may have NR significance for association with:**

☒ **A Events**      ☐ **Person**

☒ **C Engineering/Architectural**

This bridge was determined eligible by the Interagency Review Committee in February 1996.

**Was this bridge constructed in response to significant events in Maryland or local history?**

It is unknown why the first bridge at this location was built. However, during the 1930s the State Roads Commission issued bonds for the purpose of constructing new bridges and reconstructing and rebuilding old bridges within the state. The proceeds of the bond issue were placed in an account that was credited to the

Commission. Eighty percent of the proceeds had to be spent for the erection of new bridges and the reconstruction or rebuilding of old ones.

There is a single design sheet from the original construction of this structure and the approval date is given as 1932. However, the contractor files and the design files no longer exist and it is difficult to explain the need for this structure except to say construction of bridges along the Ridgely to Greensboro corridor were being constructed with the use of state bond funds.

**Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?**

No this bridge is not located in an area that is eligible for historic designation.

**Is the bridge a significant example of its type?**

Yes this bridge is a representative type of concrete arch bridge that was constructed by the State Roads Commissioners during the final phase of concrete arch construction.

**Does the bridge retain integrity of the important elements described in the Context Addendum?**

Yes this structure retains its character defining elements, including spandrel walls, parapets, abutments, and wingwalls.

**Is the bridge a significant example of the work of the manufacturer, designer and/or engineer?**

Yes, this bridge is a significant example of the work of the State Roads Commission in the 1930s.

**Should this bridge be given further study before significance analysis is made and why?**

No, this bridge should not be given further study.

**Bibliography:**

County inspection/bridge files \_\_\_\_\_ SHA inspection/bridge files   X  

Other (list):

**Surveyor:**

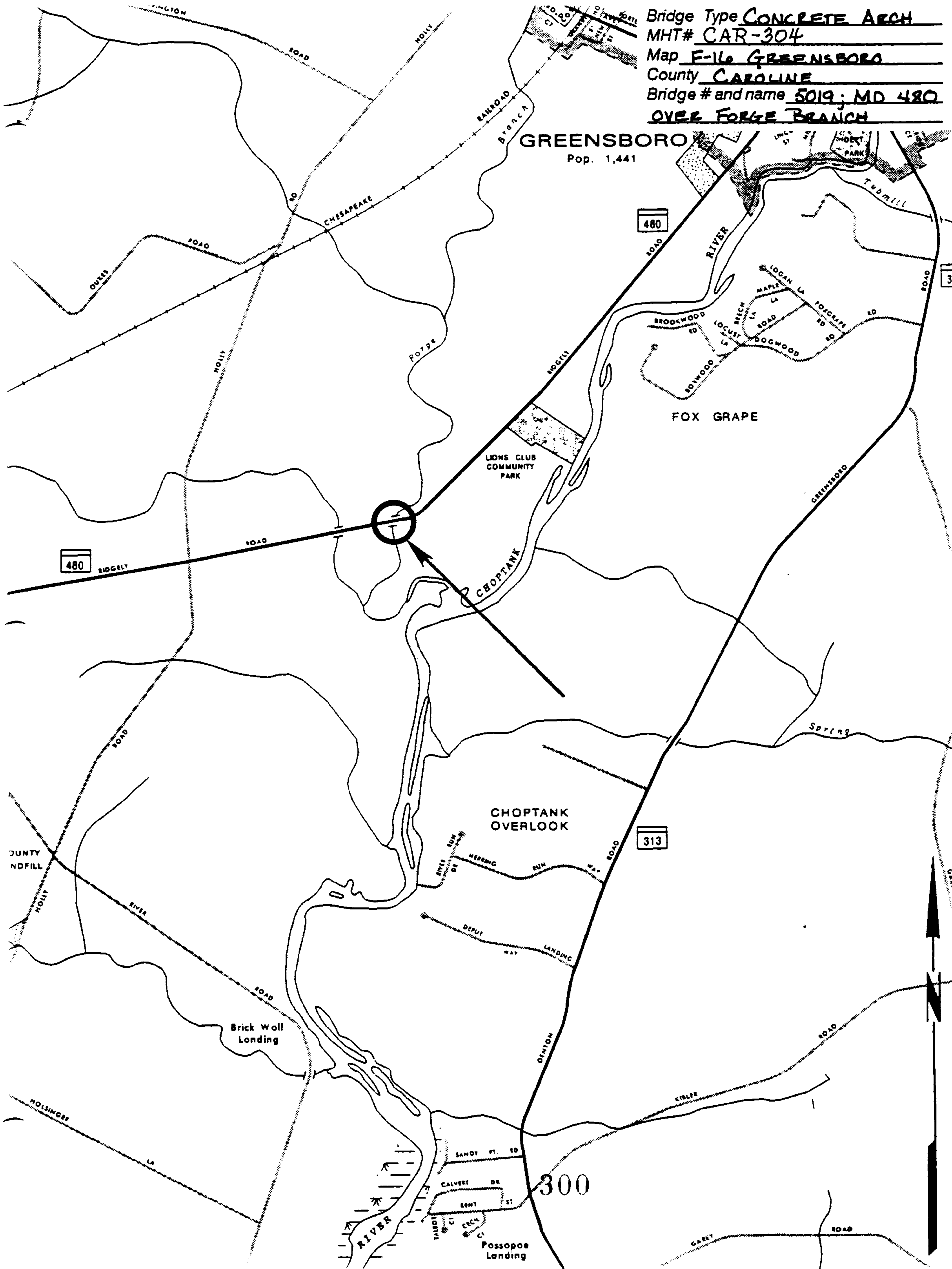
**Name:** Stacie Y. Webb **Date:** September 1995

**Organization:** State Highway Admin. **Telephone:** (410) 545-8559

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Edited by P.A.C. Spero & Company, December 1997

Bridge Type CONCRETE ARCH  
MHT# CAR-304  
Map E-16 GREENSBORO  
County CAROLINE  
Bridge # and name 5019; MD 480  
OVER FORGE BRANCH







CAR-304  
CAROLINE COUNTY  
MATT HICKSON  
3-16-95

MARYLAND ~~SHPO~~ SHA

BRIDGE 5019, LOOKING EAST  
1 OF 5







CAR-304  
CAROLINE COUNTY  
MATT HICKSON

3-10-95

MARYLAND SHPO SHA

BRIDGE 5019, LOOKING WEST

2 OF 5



CAR-304

CAROLINE COUNTY

MATT HICKSON

3-16-95

~~MARYLAND SHPO~~ SHA

BRIDGE 5019, LOOKING UPSTREAM (NW)

3 OF 5



GEORGE BRANCH BRIDGE  
BUILT - 1952  
STATE ROAD COMMISSION  
G. OLINTON JRL - CHAIRMAN  
B. BROOKE LEE ROBERT LACY  
H. D. WILSON JR. - CHIEF ENGINEER  
W. C. HOPKINS - BRIDGE ENGINEER



CAR-304

CAROLINE COUNTY

MATT HICKSON

3-16-95

MARYLAND SHPO SHA

BRIDGE 509, PLAQUE ON UPSTREAM PARAPET

4 OF 5







CAR-304  
CAROLINE COUNTY  
MATT HICKSON

3-16-95

~~MARYLAND SHPO SAA~~

BRIDGE 5019, LOOKING DOWNSTREAM (SE)

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